

Report from the University of Nebraska-Lincoln

to the

Legislative Interim Study of Nebraska Innovation Campus

September 16, 2016

[Enclosed is a report prepared by the University of Nebraska-Lincoln as background information for the Interim Study of Nebraska Innovation Campus by the Appropriations Committee pursuant to LR 200. This report as four appendices that provide important documentation relative to issues raised in the report. The University also is submitting supplemental materials in the form of 9 Exhibits that are largely source documents.]

I. Introduction: Research Parks – What they are and why they are important to regional economies

The North Carolina Research Triangle, one of the first major university-related research parks and perhaps the most famous, was created over 50 years ago. Over that fifty years, other universities have developed their own research parks, with varying success. Some of these parks have been largely real estate developments—the University seeks to attract private tenants to locate on the park with the hope of securing rental income for use by the University.

Nebraska Innovation Campus (NIC) did not follow this model. Rather, NIC is designed intentionally to contribute to economic development in Nebraska by recruiting companies and creating jobs, by attracting and retaining young people, and by enhancing University research efforts. The central concept is to leverage the expanding enrollments and research agenda of the University to attract private companies to Nebraska or to assist Nebraska companies to grow in Nebraska. Tenants, or partners, to qualify for locating on Nebraska Innovation Campus must demonstrate the existence or potential for a relationship with the University, either by engaging in joint or collaborative research or implementing significant internship opportunities for our students.

This is a unique time for the development of such an enterprise. Many other Universities across the country have developed research parks and Nebraska is at a competitive disadvantage without one. Moreover, UNL has some unique strengths that position it well to compete and to bring economic growth to Nebraska. Innovation is increasingly important in the creation of new companies and the success of established ones. Universities are the source

of significant innovation and, as important, the talent that can spark innovation. Private companies are increasingly realizing that establishing an entry into the university environment can create a business advantage in terms of access to innovation and to the talent needed for their workforce.

National studies demonstrate that most of the new jobs created in this country are by small or medium size businesses, including start-up companies built on innovation. The University created an “accelerator”, designed to offer a variety of services in order to allow start-up companies to thrive. Most importantly, the millennial generation, from which much innovation derives, values a work environment with an innovative and interactive culture. Nebraska Innovation Campus is designed to allow creative people from a variety of companies, by being co-located and engaged with students and faculty, to spontaneously interact together with the expectation that more innovation will result.

As the possibility of creating a research park on the former Nebraska State Fairgrounds materialized, the University sought input from many sources to understand the different models of research parks and determine which might be most appropriate for Nebraska. One key source of information came from a 2007 Battelle study commissioned by the Association of University Research Parks (AURP). An update of the Battelle study was performed in 2012 and is listed in the supporting material as **Exhibit 1**.

In the Battelle Study it is noted that AURP defines a university research park as a property-based venture with the following attributes: 1) a property master plan designed for research and commercialization; 2) involvement of at least one university or other research institution;

and 3) a business plan that encourages the establishment and growth of new companies, supports technology translation from the lab to the marketplace, and focuses on technology-led economic development.

The Battelle Study relates several key findings about how university research parks operate and what the key factors are in driving success of the parks. Key takeaways from this report are:

- Effort and resources have to be put into developing and creating an **environment** that attracts talent. This means faculty, student and industry talent. Talent is attracted to creative spaces, interesting work and a stimulating culture.
- There has to be a **place** developed where faculty and students can come together with industry.
- The **Live-Work-Play** model is important in attracting talent and creating a place where talent wants to be. This is especially true for millennial talent.
- Innovation activities result in measurable **economic development** successes, particularly through the incubation of emerging technology companies.
- Research parks contribute significantly to regional innovation ecosystems and are key to driving **regional economies**.

Creating the Correct Environment

Companies seek out universities initially for access to faculty and/or specialized equipment. Developing policies and processes for these interactions to occur is fundamental to starting the relationship building process. Once this relationship is started or at least introduced, the

discussion with companies quickly turns to employee acquisition and development. Companies understand that their ability to compete in global marketplaces depends on their ability to acquire talent. By locating near research universities, companies have access to undergraduate and graduate student talent. These talent-rich environments enable a host of opportunities for companies to interact and recruit students, especially through internships during the academic year. Creating environments that attract students will attract companies. If a community does not have mountains or oceans, it has to work harder to create an environment that attracts talent.

Creating a Place

It is imperative to create a “place” where university faculty and students can come together. Proximity does matter and having a research park situated adjacent to a research university facilitates the interaction of faculty, students and company employees. Starting from scratch, NIC has a unique opportunity to create the “right” place for attracting talent and producing innovation.

Live-Work-Play

Where people work, how they live and where they play evolves with each generation. A new model of people wanting to live close to their work with multiple options for entertainment (play) is evolving, replacing the suburban models of living where many competing research parks are located. Millennials as a group are more interested in urban living, with work and entertainment options nearby. NIC, with its proximity to downtown

Lincoln, the University, and the new Haymarket district, has the ability to create a place that will be attractive to young technology workers.

Economic Development

By bringing the assets of a research university together with private industry, NIC hopes to play a key role in regional economic development. Research parks tend to help a region cluster economic development assets in ways that can accelerate economic growth and international competitiveness.

Furthermore, investment in providing startup companies with needed resources (space, peer-to-peer interactions, mentors, access to investment capital, etc.) is critical to helping technology based companies incubate and grow. Dynamic growth in research park-located companies usually come from startups that are more successful, rather than from recruiting existing large companies.

This is the promise of Nebraska Innovation Campus. Nebraska can leverage its investment in the University to drive technology-based businesses. While we have a

BATTELLE REPORT

Technology-based development has emerged as the key difference in a region's economic performance. A study by the Milken Institute, a private, non-profit research organization, in evaluating the economic growth across 315 regions in the U.S. over the 1975 to 1998 period, found that 65 percent of the difference in economic success for regions is accounted for by the growth and presence of high technology industries. Moreover, the Milken Institute identified that research centers and institutes are "indisputably the most important factors in incubating high tech industries." And the Milken Institute is not alone in noting that the fast-growing technology-oriented economies are typically anchored by major research universities interacting with a robust technology-oriented private sector. A study prepared for the U.S. Small Business Administration found that "Research universities and investment in research universities are major factors contributing to economic growth in the labor market areas in which the universities are situated." Studies by the Office of Technology Policy and others have found that all areas of technology-based economic development in the U.S. have strong concentrations of both university and private research.

comparative advantage in food, water, and energy, there are numerous other assets of the University that should attract private partners.

II. History of Nebraska Innovation Campus¹

Introduction

Beginning in 2003, the university, governmental entities and private citizens worked together through a series of efforts to assist the State Fair in solving the Fair's financial problems and to secure its future.

After numerous organized public discussions and meetings, in late 2006 a final recommendation was made to move the State Fair, then located at the historic State Fairgrounds, north of the University of Nebraska-Lincoln's City Campus, to a University-owned site at 84th and Havelock Avenue in Lincoln. With support from local business leaders and members of the Unicameral it was argued that the State Fair at its current location could not be successful with aging capital facilities and declining attendance, and that the land would be better utilized for expansion of University research. Such a move would require legislative approval. This recommendation was also substantiated in part by an independent consultant contracted by the Legislature's Agriculture Committee that reviewed the cost to renovate or move the Fair.

A number of bills were introduced in the 2007 and 2008 legislative sessions relating to the future of the State Fair. During the course of legislative deliberations, negotiations were conducted by the Agriculture Committee, the Speaker of the Legislature, the Governor's Office,

¹ A more detailed time-line of the development of Nebraska Innovation Campus is provided in **Appendix A**.

the University, Lincoln business leaders, and the State Fair Board regarding the State Fair’s future. Grand Island made a bid to become the home of the State Fair. In the end, the parties agreed that the State Fair would move to Grand Island and its current home would be transferred to the Board of Regents. To accomplish this result financially, the State Fair Board required \$42 million dollars to construct new buildings in Grand Island.

Accordingly, the following contributions were made to move the State Fair:

Legislative Appropriations:	\$5 million
University of Nebraska	\$21.5 million
State Fair Board	\$7 million
Grand Island	\$8.5 million

Ultimately, LB 1116 was approved by the Agriculture Committee and forwarded as the committee’s priority bill. The bill required the State Fair to move to Grand Island and the property be transferred to the Board of Regents by January 1, 2010. The full Legislature approved the bill on a vote of 44-3-2 on April 16, 2008. A subsequent court challenge was rejected by the Nebraska Supreme Court in 2010. A petition drive to overturn LB 1116 by referendum failed to obtain enough signatures.

Throughout the hearings and legislative discussions, the University indicated its intention to build a technology research park (subsequently named Nebraska Innovation Campus) that would leverage the expanding research enterprise of the University on behalf of economic development. The goal would be to create a campus that would attract private sector businesses as tenants. It was becoming clear throughout the economy that innovation was the area where the U.S. could continue to have a competitive advantage and increasingly private sector companies were interested in accessing University technology. Moreover, acquisition of human talent was a key interest of private companies and locating near a university with its flow of well-trained graduates, was increasingly attractive. The idea was not just a real estate development; tenants must have a connection with the University, either through research partnerships, student internships, or the promise of either. It was also proposed the campus would attempt to stimulate start-up companies, many of which would likely emerge from the research activity of university faculty, given that a high percentage of new jobs are created by small and start-up businesses.

STATE FAIR SUCCESS

The move to Grand Island proved successful for the Nebraska State Fair. During its last years in Lincoln, attendance was declining and an independent consultant hired by the Legislature recommended that 29 of its buildings be removed and 37 buildings required renovation. In 2007 the Fair was operating at a deficit of \$2.2 million.

With an infusion of \$42 million dollars to effectuate the move, the Fair is now achieving record attendance. From a record low in 2003 of 238,000, attendance in 2015 was 352,172. It now contains over 500,000 sq. ft. of new buildings including 3 bars, an arena, and 2 exhibition buildings.

The University of Nebraska-Lincoln continues to partner with the State Fair. 4-H, a program of Nebraska Cooperative Extension, is actively engaged in Fair activities and the University invested over \$5M dollars in a new exhibit entitled "Raising Nebraska: Your Food and the Families Who Grow It." This new exhibit is an interactive educational showcase regarding how food moves from farm to table.

Initial Planning

With the passage of LB 1116, the University utilized national experts to plan for Nebraska Innovation Campus (NIC). The University conducted RFP's for two consultants: one to provide a master plan for facility construction on the property, and one to provide a business plan related to the operation of the campus. SmithGroup/JJR of Ann Arbor, Michigan, was selected to provide a Master Plan. The Noddle Company, of Omaha, was selected to provide a business plan.

UNIVERSITY ASSOCIATED LOCAL STARTUPS

University innovation has contributed to state economic development over the decades. The current Gallup Corporation, headquartered in Omaha, is a product of a faculty member's research into positive psychology. LiCor, ISCO, Geneseek, and other local businesses are built on university innovation. The most recent successful example is Hudl, a sports related computer software company, began as a course project by three students in the Raikes School and has now expanded into an international company. Its recent announcement to build its headquarters in Lincoln with projections of up to 500 employees is the model on which Innovation Campus is built.

Both firms hired independent experts, including some Nebraska engineering firms, to complete their tasks. Both firms incorporated best practices learned from other research campuses across the country. Centennial Campus at North Carolina State became a key model and visits were made by the consultants, University officials, and local business leaders.

The plans were completed in 2009 and approved on November 20, 2009 by the Board of Regents. While both plans have been modified to account for changing conditions, the central framework of the plans continues to drive operations and developments. The original master plan for the campus is provided in **Exhibit 2**.

Governance

Given that the primary thrust of NIC was to engage the private sector on behalf of economic development, any governance structure had to be sufficiently flexible to meet the needs of private sector companies and perceived to be grounded in the realities of private sector businesses. Moreover, any engagement with private companies had to be capable of complying with their confidentiality requirements. The Board of Regents created the Nebraska Innovation Campus Development Corporation (NICDC), an independent 501(c)(3) Corporation to be governed by a Board of Directors to be comprised of a majority of private sector members. The original Board consisted of the following individuals:

Tom Henning, President of Assurity Life Insurance Company, Lincoln

Tonn Ostergard, CEO of Crete Carrier, Lincoln

JoAnn Martin, CEO of Ameritas Insurance Company, Lincoln

Dana Bradford, previously led the McCarthy Organization, an Omaha-based private equity firm and now Executive Chairman Waitt Brands, Omaha

Matt Williams, Chairman, Gothenburg State Bank and now a state senator, Gothenburg

Harvey Perlman, Chancellor of UNL

Ronnie Green, UNL Senior Vice Chancellor for Academic Affairs, University of Nebraska Vice President for Agriculture and Natural Resources, and UNL Harlan Vice Chancellor, Institute of Agriculture and Natural Resources

Prem Paul, UNL Vice Chancellor for Research and Economic Development.

J. B. Milliken, President of the University of Nebraska (replaced by **President Hank Bounds**)

[These members continue to serve. In July they were joined by **Larry Miller**, President, Philbro Animal Health Corporation, Teaneck, N.J.]

The former state fair property was essentially bare ground. None of the existing buildings were suitable for use. Moreover, the infrastructure, such as roads, electrical, water, and sewers, was antiquated and inadequate. To serve as a research hub, internet access was critical and was not available on the property. It became apparent that the University would not be financially able to fund the infrastructure necessary to move forward. The planning thus contemplated selecting a private developer, one that was prepared to assume some of the risk of the development. Private development would also place the buildings on the tax rolls and thus allow access to TIF financing.

The governance structure for development is as follows: The Board of Regents holds title to the land. The Board executed a long-term ground lease to the Nebraska Innovation Campus Development Corporation (NICDC). NICDC was thus in a position to select a private developer to develop the property. The developer obtains a “site development” lease from NICDC which authorizes the developer to construct a particular building on the site. NICDC then negotiates with the developer for a share in the lease payments from constructed buildings. Ultimately, when the property is more fully developed, the income stream from these payments should permit NICDC to become a self-supporting entity, capable of making further investments in the campus and its partners. However, during the initial phases of the campus, there is little

income and the University is subsidizing the staffing and activities necessary to move Nebraska Innovation Campus forward.

Staffing

[Nebraska Innovation Campus](#)

For the project to be successful, a full time staff was necessary both to supervise construction and, more importantly, to market the campus and to recruit private sector companies to the property. Initially, the staff consisted of a full-time director (Dan Duncan) and his assistant. As space became available for lease, additional staff were added to focus on recruitment and marketing.

[NUtech Ventures](#)

The University also reconfigured other offices to give the University a coordinated approach to private sector partnerships. NUtech Ventures is another independent 501(c)(3) not for profit company that is responsible for marketing inventions and other innovations coming out of University research. Pursuant to the Board of Regent's policy on patentable technology, all intellectual property created by faculty within the scope of their employment belongs to the University, with the faculty member allowed to share in any royalties or other value obtained from the invention. NUtech Ventures markets on behalf of the Board and the inventor technology from university research.

For example, if a faculty member invents a patentable technology, NUtech Ventures staff will assist the faculty member in obtaining a patent and then will market the technology to appropriate companies. NUtech Ventures staff engages with companies, large and small,

around the world and are in a good position to also market NIC. Some faculty innovations may also be appropriate for initiating a start-up company and NUtech Ventures assist them in that process as well.

Industry Relations

The University also increasingly does research funded directly by private sector companies (approximately \$12 million/year). A few years ago the University created an office of Industry Relations within the Office of Research and Economic Development to provide a focused office for companies to engage the University. This office seeks to connect faculty members with companies who could utilize their expertise.

University engagement with the private sector is often multifaceted. A company that may license university technology may or may not have an interest in locating on NIC and companies who first engage us to do joint research may come to want a closer relationship by becoming a partner on NIC. Thus, the University has physically brought the staff of the NIC, NUtech Ventures, and Industrial Relations together in one location. The leaders of these efforts work collaboratively to maximize university engagement with companies.

BAYER CROP SCIENCE ENGAGEMENT

In 2010, Bayer Crop Science, a major international agri-business enterprise, sought to secure access to particular wheat hybrids developed by faculty at the University. Negotiations resulted in them acquiring a non-exclusive license to the hybrids for a royalty rate. In addition the company provided philanthropic gifts to fund an endowed professorship in wheat breeding as well as support for the wheat breeding program. The company has designated Nebraska as headquarters for their North American wheat breeding program and has established a facility and experimental farm West of Lincoln. With the success of this activity Bayer Crop Science subsequently licensed soybean germplasm from the university in a similar manner. These investments in Nebraska were the direct result of the company's interest in university faculty innovation.

Selection of a Developer

The Board of Directors of NICDC engaged in national RFI and RFP processes to select an initial developer of the property. A number of firms applied and were interviewed. The RFP made clear that the developer would be expected to assume some of the financial risk of the project and to be an active partner in the development of NIC. Eventually Woodbury Corporation, managing partner of the investors Nebraska Nova LLC, was selected. The firm had experience developing a similar research campus for the University of Utah and had begun other projects in Lincoln in association with Nebraska partners. They agreed to initiate the construction of the necessary infrastructure, in part through TIF financing. They also agreed that once 50% of a proposed building was leased, they would take the financial risk of constructing the entire building and this commitment would be ongoing. Thus, once a first building was fully leased, they would be prepared to build a second building once 50% of the next building had signed tenants.

The partnership between Woodbury and the Nebraska developers ultimately was dissolved and Woodbury withdrew from the project. Tetrad Property Group, the original Nebraska partner, is currently the developer. They are not, however, an exclusive developer. Any other developer (or a company wanting to use its own developer) can secure a site development lease from NICDC, but must, of course, reimburse Tetrad Property Group for the appropriate share of the infrastructure.

A State Investment—Initial Construction

In 2011, at the request of Governor Dave Heineman, the Legislature appropriated \$25 million to assist the University to initiate construction of NIC. Lessons learned from other successful research campuses suggested that: (1) it is difficult to attract private companies if space is not available within a reasonable time frame; and (2) in its initial stages, a strong University presence on the campus provides confidence to the marketplace that the development will, in fact, materialize. This appropriation was critical to our ability to develop NIC far faster than anyone initially predicted.

Ten million dollars of this appropriation were used to renovate approximately one-half of the former 4-H building into the NIC Conference Center. The NIC Conference Center has proven important in attracting people and companies to NIC. With an agreement by the University to lease space for housing the NIC staff, the developer agreed to renovate the other half of the former 4-H building for possible tenant lease and to build a companion office building for both university and private sector offices. The 4-H building was transitioned into a condominium form of ownership with different owners for different sections of the building. The Conference Center portion is a state building owned by the Board of Regents. The Conference Center and office building opened in the summer of 2014.

The remaining \$15 million of the appropriation was designed to trigger the developer's agreement to build an entire building if one-half were leased. In order to make this work financially, the building itself needed to be on the tax rolls in order to access TIF. Thus, the shell of the entire building would be constructed by and owned by the developer and the state funds

would be employed throughout the building for furnishings and other systems. The University would accordingly be entitled to a pro-rata share of any lease proceeds.

Development of the Food, Water, Energy Theme

Throughout the process for planning NIC the University has sought a niche that would build on our comparative advantages. There are several similar university-based research campuses and our success depended on being distinctive. Given Nebraska's base in agriculture and the scientific developments taking place throughout the industry, we have promoted NIC as specializing in food, water, and energy. We do not intend to make these themes exclusive.

In part, this decision was aided by our growing relationship with ConAgra Foods, headquartered in Omaha, a major gift from the Daugherty Foundation to create the Water for Food Institute, and continuing support for our energy research from NPPD. The ConAgra relationship grew from special Ph.D. programs for their mid-management, their involvement in helping to focus our curriculum on issues associated with modern food processing, and some small focused joint research efforts. Through these engagements we were able to better understand the challenges facing the food processing industry and ConAgra came to

CONAGRA POPCORN

With ConAgra making plans to become the first corporate partner on NIC, several areas of possible synergy were discussed with the University. One of the areas discussed, and eventually developed, was a strong relationship in popcorn breeding. These discussions resulted in ConAgra closing their out-of-state popcorn breeding facility and signing a long-term agreement with UNL to design and implement a popcorn breeding program for ConAgra varieties. This multi-million dollar agreement between ConAgra and the University happened because NIC provided an opportunity for discussion and dialog on how to deepen the relationship. While the popcorn work is not happening on NIC, it is happening because of NIC, proving that NIC can catalyze relationships beyond its physical confines.

learn of research capabilities we had that might influence that industry over time. These

conversations, along with ConAgra's commitment to help, convinced us that food was a key niche on NIC. This, and the need to populate the campus initially with a University presence, led to the decision to move the entire Food Science and Technology Department to the campus.

This led to planning for the Food Innovation Center. We were committed to preserving the façade of the old Industrial Arts Building and that shell, along with a new major laboratory building, became the focus. The University did not need all of the space in these two buildings, but would need to lease a substantial amount to accommodate the Food Science and Technology Department and to pursue some of the initiatives made possible with ConAgra's encouragement and assistance. As the plans developed, it became clear that if the University agreed to lease the entire facility, the financing costs would be reduced and thus the University's cost/sq. ft. would also be reduced. A portion of the \$15 million state contribution allowed us to further reduce our annual costs by significantly reducing the build out costs that otherwise would have been incorporated into the lease. The result is that the University occupies a large portion of the space and intends to sublease the remainder to private sector tenants at market rates. The Food Innovation Center opened in July, 2015.

Through the use of Nebraska Research Initiative funding, the University acquired a LemnaTec High Throughput Phenotyping System that transforms the opportunity for early identification of plants with desirable characteristics, i.e. drought tolerance. It is one of the few such installations in the world. It will be an attraction to private plant-based biotechnology companies as well as our own faculty. The Greenhouse Innovation Center was constructed to

house the LemnaTec System. The University master leased the entire structure and will sub-lease space to private companies. A small portion of the original \$15 million state contribution was used in this facility to fund build-out costs.

The CRES

One of the early concerns about locating a research campus on the former state fairgrounds was its location adjacent to Lincoln’s major water treatment plant. Early in the initial planning for the campus, it was suggested that it might be possible to utilize the water coming out of that plant to heat and cool the buildings on the campus. Once the developer was selected, we pursued this possibility vigorously. Sustainability and “green” energy are embedded in the goals of most major companies today and assist in attracting millennial talent. Further exploration proved the concept workable and the Centralized Renewable Energy System was constructed. It borrows the effluent from the City’s Waste Water Treatment Plant and acts much like a geothermal system with lower costs to produce heating and cooling for buildings on NIC. It is estimated the CRES can heat and cool up to 1.675 million sq. /ft. of office space. The University financed the CRES through NuCorp, a partnership with Lincoln Electric System, at an interest rate of less than 1% with the expectation that energy charges will ultimately cover the financing. For a more detailed description of the CRES, see **Exhibit 3**.

III. Current Status of Nebraska Innovation Campus

Construction

NIC has a total of approximately 372,000 sq. ft. of space contained in a 3 building complex - Innovation Commons, the Food Innovation Center, and the Greenhouse Innovation Center.

With the exception of the NIC Conference Center (which is owned by the Board of Regents) all of these buildings are privately owned and operated. The private buildings are owned by Tetrad Property Group who is the non-exclusive developer for phase I of NIC. The original master plan has been revised and is available as **Exhibit 4**. Land available for development would permit over 2 million square feet of construction at current levels of height and density. In return for the University agreeing to lease the entire Food Innovation Center, the developer agreed, and is proceeding, to build another 80,000 sq. ft. building at its own risk.

Innovation Commons

Innovation Commons is a state-of-the art office complex and the hub of Nebraska Innovation Campus. The 100-year-old 4-H building was updated and significantly expanded to create a conference center with a capacity of 400, including a banquet room. Innovation Commons houses the NIC offices and is also home to the Robert B. Daugherty Water for Food Institute at the University of Nebraska, NUtech Ventures, UNL Industry Relations, Nebraska Innovation Studio, and Tetrad Property Group.

Food Innovation Center

The NIC Food Innovation Center is a 178,000 square foot complex that houses the University of Nebraska–Lincoln Food Science and Technology Department, ConAgra Foods, Inc. and other private companies. The center provides world-class facilities for the UNL Food Science and Technology Department and private partners in leased space. The NIC Food Innovation Center includes a state-of-the-art distance education classroom, wet/dry lab

research space, food grade/non-food grade pilot plant space and office space. This facility, as well as others on NIC, focuses on facilitating private/public partnerships.

[Greenhouse Innovation Center](#)

The NIC Greenhouse Innovation Center is 45,000 square feet of greenhouse and head house space. Phase I includes 15,000 square feet of greenhouse space which can be quickly and economically expanded to 30,000 square feet. The greenhouses are heated and cooled with sustainable energy. The facility features state-of-the-art computer environmental controls and 22-foot eave heights to allow for optimal air circulation. Tailored greenhouse services are available. The center will also house a LemnaTec High-Throughput Plant Phenotyping System. At full build-out, the NIC Greenhouse Innovation Center will include 60,000 square feet of greenhouse space connected to 80,000 square feet of office and wet lab space.

[Nebraska Innovation Studio](#)

A “culture of innovation” is an important attraction for private companies and the talent they require. From the outset we have tried to create a culture of spontaneous interaction among individuals on the property. It has been proven in numerous settings (Silicon Valley, Bell Laboratories) that unplanned interactions among innovative people is an important source of new ideas. On the recommendation of the faculty advisory committee, we have created a “makerspace” modeled loosely after similar spaces at MIT and other entrepreneurial universities.

Nebraskans are by tradition and their environment “makers”. Those particularly in rural environments learned by necessity to “fix” things themselves or to make “work-a-rounds” to

solve problems. Making is rapidly becoming a key cog in innovation environments around the world. As part of the innovation culture we explored the possibility of creating a space where tools of various kinds would be available to “make things”. These tools could represent old technology, such as sewing machines and wood-working equipment, as well as the new digital fabrication machines (3-D printing, laser cutting, computer controlled milling and shaping machines). Individuals would be able to use the space to follow their own interests and, in the process, interact with others pursuing different “making processes”. Out of that interaction exciting spontaneous interaction occurs. In order to gauge local interest in this movement, a meeting was held in February of 2014 on the UNL campus. Expectations were that about 50 people might attend; 208 showed up and from this group the UNL Maker Club was formed. Today membership is about 750 people, making it the second largest student organization on campus. Membership is comprised of about 70% UNL students, 15% UNL faculty and staff and 15% community members. Learn more about the UNL Maker Club at <http://make.unl.edu/>.

This level of interest was the catalyst for developing plans for Nebraska Innovation Studio (NIS) on NIC. Private individuals and companies were solicited for funds, equipment, and their expertise. Many responded favorably. Phase I of the Innovation Studio is constructed and consists of approximately 6,000 sq. ft. located in the south wing of Innovation Commons. At full build-out Innovation Studio will encompass approximately 16,000 sq. ft. and contain a woodworking shop, metal working shop, rapid prototyping shop, art studio/shop, electronics area, and meeting and collaboration areas. It is open to faculty, students, or community members who pay modest monthly dues to access the facility and to be trained on the

equipment. Learn more about Nebraska Innovation Studio by visiting www.innovationstudio.unl.edu.

[NMotion Accelerator](#)

NMotion is a mentor-driven, education-focused, startup accelerator based in Lincoln, Nebraska. Its focus is on high growth software and technology-based businesses in targeted industries of agriculture, education, finance/insurance, healthcare, human resources, and sports. It is run using UNL and community resources for operations. Nebraska Angels and Invest Nebraska provide the venture funding for the companies accepted into the program.

NMotion helps accepted companies by building a community of proven mentors, founders and business leaders to provide support, immerses companies in workshops designed to transmit the latest techniques and tactics from global sources, and provides an environment for companies to build, test, experiment and grow. More about NMotion, and their three years of helping companies can be found at <http://www.nmotion.co/>.

NMotion is launching a new program in the fall of 2015 that will be located on NIC. This program called “Prelaunch” is an intensive training course in what it takes to turn an idea into a high-tech business. It will help people and companies flesh out ideas, form teams and become more prepared to apply to accelerator programs like NMotion. For more information about Prelaunch visit www.nmotion.co/pre/.

NMotion is having a major impact on Nebraska Innovation Campus. A 2014 graduate of the program Quantified Ag will locate on NIC in October of 2015. Quantified Ag provides

biometric sensing ear tags and a data analysis toolset to constantly monitor the health of live food animals.

Another NMotion company, IntelliFarm, will also be located on NIC in October of 2015. IntelliFarm has several products under development. Their first products will enable center pivot irrigation systems to more readily handle strong windstorms without tipping over.

[Biotech Connector](#)

There are significant opportunities for leveraging Nebraska's biotechnology industries for further economic growth. From 2004 to 2013, Maryland, North Carolina, and Nebraska were the top three states in

terms of genetics, biochemistry, and molecular biology research. Growing research at UNL and at UNMC suggests the potential for further growth. One of the biggest restraints to growing new biotechnology companies in Nebraska is the absence of high-quality, cost-effective research laboratory infrastructure. Software companies can begin in an office with internet connections. Biotechnology companies need expensive wet laboratories to pursue their innovations. Through a partnership between UNL, Nebraska Innovation Campus, Bio-Nebraska Life Sciences Association, the Nebraska Department of Economic Development, and Invest Nebraska, we intend to create on Nebraska Innovation Campus the "Biotech Connector"—a

QUANTIFIED AG

Quantified Ag, a 2014 graduate of NMotion, is working towards having a positive impact on cattle health and the economics of the cattle industry. Of the 29 million beef cattle in the U.S, greater than ½ of these are in feed lots. Quantified Ag updated the cattle ear tag with smart technology to measure parameters of cattle health such as head movement. The technology provided by Quantified Ag allows the rancher to identify sick cattle early and prevent further illness and loss. Quantified Ag is already expanding its team and working with faculty and students in many departments such as bioinformatics, marketing and graphic arts. Quantified Ag is led by Mr. Vishal Singh. For more information, visit <http://quantifiedag.com/>.

place where biotech start-ups can access the laboratories they need. This coalition has received a grant from the U.S. Department of Commerce Economic Development Administration to construct and equip 10,000 square feet of wet research laboratory space on Nebraska Innovation Campus.

Leasing

Of the 372,000 square feet of newly constructed space, 87% is leased. UNL has master leased the Food Innovation and Greenhouse Innovation Centers and is offering to sublease to private companies some of the space in these facilities. When the unleased sublease space is taken into account, 74% of the available space is leased.

As is the norm, leases at Nebraska Innovation Campus are calculated via square foot (SF) leased. Leasing rates for class A office space are listed at \$18 SF NNN² for most spaces in the Innovation Commons Building although there is one space that is listed below this value. As of July 31, 2015, comparable new space in downtown Lincoln is listed as follows:

- Farmers Mutual Building- \$18 SF NNN
- 700 "O" Street- \$18 SF NNN
- Olsson Associates HQ building- \$18 SF NNN

We are not aware of new or pilot plant space available for lease in the downtown area for comparison purposes. Our rate for these specialty types of spaces is \$20.51 / SF NNN. Thus,

² NNN refers to "triple net" leases where the tenant is responsible for property taxes, insurance, and common area maintenance.

the leasing rates at Nebraska Innovation Campus are within market value of comparable spaces for new construction.

Partnerships

As of September 2, 2015, the following private partners have been announced at Nebraska Innovation Campus:

- ConAgra Foods
- Tetrad Property Group
- CCS Presentation Systems
- Food Dreams Made Real
- Echo Canyon Systems, Strategies, and Solutions
- Hastings HVAC
- Quantified Ag
- NuTek Food Sciences LLC
- Metagenome Analytics LLC
- IntelliFarm

As of September 2, 2015, the following University partners have been announced at Nebraska Innovation Campus:

- Nebraska Innovation Campus Administrative Offices

FOOD DREAMS MADE REAL

Suji's Cuisine (Food Dreams Made Real) is led by Ms. Suji Park. Suji Park has made a career out of innovating and works closely with the Department of Food Science and Technology and The Food Processing Center. Suji's Cuisine leverages some of the most cutting-edge food technology processes and experts in order to provide fully cooked, zero preservative, USDA choice beef and pork products to the American Consumer. These products are exceptionally long-lived on retailers' shelves due to the freshness of the product and High Pressure Pasteurization technology. This makes them not only delicious, wholesome and healthy, but also affordable. Ms. Park's goal of bringing high-quality, zero preservative Korean inspired food products to the American consumer has resulted in Costco US committing to thousands of units of the initial product line, "Bulgogi," and with Bernatello's Foods deploying the savory sauce as the basis for their Korean themed pizzas. Ms. Park is in the process of expanding her R&D staff housed at NIC. For more information, visit www.sujiscuisine.com.

- UNL Industry Relations
- NUtech Ventures
- Robert B. Daugherty Water for Food Institute
- UNL Department of Food Science and Technology
- UNL Food Processing Center
- UNL Food Allergy Research and Resource Program
- Institute of Agriculture and Natural Resources (Greenhouse Innovation Center)

In addition, numerous other partners such as those associated with the Alliance for Advanced Food Sanitation (see sidebar) will also be partnering with Nebraska Innovation Campus.

We look forward to the opportunity to formally announce additional partners in the near future.

Recruitment and Marketing Plan

Nebraska Innovation Campus follows a marketing and recruiting plan approved by the NICDC Board of Directors. An overview of the plan is in this packet. At the core of the marketing plan is the need to develop a place and culture that can attract and retain talent. To do this a great deal of thought has been placed on building design, connection between buildings and programs that NIC will run that develops a culture conducive to attracting talent. The main source of talent that we want to attract is millennials, the 18 to 30-year-old demographic. The Live-Work-Play model we are developing the campus around, our

sustainability efforts and our engagement programs are all tailored at attracting this demographic of workers.

The strategy is multifaceted, focusing not only on optimizing opportunities to convey factual information about NIC via various methods, but also leveraging recruiting opportunities via champions, partners, and other pro-active means.

Our consistent message highlights the unique variety of spaces and culture – our differentiators. Given the fact that our available space varies from office space to specialized spaces such as pilot plant, greenhouse and wet lab space, we have a wide range of potential partners. The innovative culture being built at NIC sets us apart from other venues.

Collaborative initiatives, like the Alliance for Advanced Food Sanitation, demonstrate the potential for private-public partnerships at NIC. Our plan to reach potential partners includes leveraging linkages of not only University units/departments and research forums, but also our current partners, champions and appropriate industry venues. We maximize our reach via web, print, and social media opportunities. The current marketing plan is attached as **Exhibit 5**.

THE ALLIANCE FOR ADVANCED FOOD SANITATION

The expertise and research reputation of the Food Science and Technology Department is the foundation of the Alliance for Advanced Food Sanitation. The timing for this initiative is opportune to support the mandates for validated preventive controls for food safety hazards that will be promulgated by the U.S. Food and Drug Administration's Food Safety Modernization Act (2011). Our private partners have indicated food sanitation is a \$10B annual issue for the industry. Work to build and establish the Alliance for Advanced Food Sanitation began in the summer of 2014. Since that time, positive and steady progress has been made resulting in the establishment of this Alliance. The Alliance's research, extension, and teaching activities will engage interested UNL faculty and be designed to address the needs and interests of the private sector partners. The overall goal of these activities will be to develop improved sanitation practices that can be implemented by the food processing and affiliated industries. Founding companies of the Alliance include: Cargill, Commercial Food Sanitation, ConAgra Foods, Ecolab, Hershey, Kellogg, Nestle and Neogen.

Nebraska Innovation Campus, like many public-private partnerships, requires a balanced approach to the different methods of doing business by public and private institutions. Private companies must be circumspect with regard to information about their activities that, if known, might reduce their ability to compete effectively. Thus, trade secrets and other confidential and financial information are carefully protected. Public institutions are accustomed to working in a more public environment to assure accountability. In recruiting private companies, we are normally obligated to sign confidentiality and non-disclosure agreements. The University understands its responsibility to be accountable and is working toward finding the appropriate balance. As more private tenants populate the development, it will be possible to release better data regarding lease rates and income in ways that will not permit the identification of a particular company's information.

Business Planning

The table that follows shows the investments by source that have been made or committed to Nebraska Innovation Campus. While the University has invested considerable resources to initiate this development, nearly half of that was an investment to move the State Fair. Notwithstanding the early stage of this development, we have leveraged considerable private investment in the property. That investors would risk their own capital, and continue to do so, gives us confirmation that this development will be successful.

INNOVATION CAMPUS INVESTMENT BY SOURCE				
Investment	University	State of Nebraska	Private Sector	Philanthropy
Capital Investments			94,045,000 (a)	
Moving State Fair	21,500,000	5,000,000		
Construction				
Innovation Commons				
Conference Center		10,000,000		
Innovation Commons North	194,000			
Innovation Studio	857,000			653,000
Food Innovation Center		15,000,000		
Greenhouse Innovation Center	4,291,000			
CRES (Includes NUCorp's \$12 M Financing)	12,078,000			
NIC Support				
Equipment				1,730,000
General Support				2,750,000
Other One-time Investments				
Planning & Site Preparation	3,648,000			
Moving to FIC/GIC	1,500,000			
Plant Phenotyping Equipment		1,810,000		
Food Pilot Plant Equipment		500,000		
High Pressure Processing Unit		420,000		
	44,068,000	32,730,000	94,045,000	5,133,000
(a) Capital investment, NIC Infrastructure, and Soft Costs				
Annual operating costs of \$9.2 Million				

Benchmarking Progress Against Other Research Campuses

From the early stages of Legislative hearings, the University has indicated that Nebraska Innovation Campus would be a 15- to 25-year project. We were starting with bare ground and little history of attracting private sector companies to the campus. As we moved forward, we have tried to benchmark our progress against other similar research parks, although finding equivalents is difficult. What we have learned from others' experiences is that the initial challenge is to get started. Companies are reluctant to be pioneers in a new development, so

the acquisition of initial tenants is more difficult. It is also clear that a major University investment in the park gives comfort to companies of the seriousness and commitment of the University.

Our assessment is that we have made more progress than we earlier expected, primarily because of the initial state contribution of \$25 million and the identification of a private developer committed to our success. The early engagement of ConAgra has also contributed to the credibility of our enterprise. Our master planning efforts determined that Nebraska Innovation Campus could contain approximately 2.1 million square feet of building space. At a 15-year build out, we would have to average about 140,000 sq. ft. per year. However, in 2015 at our grand opening, we will begin with 372,000 sq. ft. of construction with another 80,000 in the design phase.

Histories of other research parks is hard to acquire, but three comparisons seem to suggest we are on track with what we should expect. Centennial Campus at North Carolina State has been the model for our thinking and planning. NC State was given 1,000 acres by the State of North Carolina in 1985. This was largely bare ground. The University constructed a university research building in 1989 and moved its Textiles Department to the campus in 1991. Thereafter it constructed three additional university research buildings before opening a building explicitly for its “private sector partners” in 1996. It opened its second “partners” building in 1999. Moving the College of Engineering to the campus in the mid-2000’s accelerated the campus development. See Centennial Campus report in **Exhibit 6**.

The Arizona Technology Park in Tucson is another example. In 1994 the University of Arizona acquired a fully built, state of the art laboratory facility from IBM. The first tenant was secured in 1996. A business incubator was initiated in 2003. By 2003 the Park had 31 tenants. See **Exhibit 7**.

The University of Illinois Research Park opened its first building in 2001. Ten years later it had over \$100 million in construction with \$63 million funded by its private developer and \$38 million by the University. It has had 75 companies in the Park and has incubated 127 startups. For fiscal year 2011, the Park was responsible for \$81 million in wages and \$169 million of economic output. See **Exhibit 8**.

A more specialized park is Clemson Universities' International Center for Automotive Research. It was conceptualized in 2003 and by 2015 had secured a total investment of \$250 million, of which approximately \$73 million was private investment. See **Exhibit 9**.

In 2014 the NICDC Board of Directors asked Bruce Wright, the Director of the University of Arizona's Technology Park, to review our progress and make recommendations. A copy of his report is attached as **Appendix B**. It represents the strongest external confirmation that Nebraska Innovation Campus is on the right path.

We will continue to rely heavily on the Association of University Research Parks (AURP) and their members to understand and adopt best practices for the development of NIC. These best practices are reflected in our original master plans and are carried forward to our current activities. We will also continue to seek consultants to evaluate and measure our performance.

As NIC matures, we have asked the Bureau of Business Research to help us benchmark existing research park metrics and develop a survey instrument and report format so we have an independent source of information regarding the economic values generated by Nebraska Innovation Campus. The metrics will include items such as: 1) jobs – direct and indirect; 2) Square Feet Constructed, Built Out and Leased; 3) number and list of partners located on NIC; and other relevant numbers.

IV. Future

Challenges and Opportunities

Nebraska Innovation Campus has developed more quickly than we originally expected. This has been the result of both careful planning as well as the investment of State funds in order to advance construction of the Conference Center and the Food Innovation Center. These anchor facilities have demonstrated to third parties that Innovation Campus is real and has allowed them to visualize first-hand the nature and quality of the development. As we move beyond the initial phase of development, we face at least two challenges related to sustaining our momentum and realizing the economic development potential for Nebraska.

The first challenge is to assure that we always have space available for lease within a reasonable time period. The period for facilities from initial design to completed construction is approximately 2 years. It is more difficult to convince companies to commit to leases if their occupancy is delayed for two years. We believe it essential that we find ways to always have approximately 40,000 sq. ft. of shell space available for lease.

The second challenge is how to accommodate start-up innovation companies. These are the types of companies that are likely to produce greater economic returns for Nebraska in the long-run, but they also obviously represent a greater risk of failure. Even the start-ups that have been successful in raising venture capital sufficient to pay rent are not ordinarily in a position to fund the build out costs associated with their space. An established company is normally in a position to build the tenant improvements into their lease payments and thus, over a long-term lease, are allowed to finance these costs without making an initial outlay. But start-up companies are not in a position to sign leases (nor are private developers prepared to depend on long-term leases) to finance these build out costs.

The third challenge in Nebraska is to create access to the venture and other capital investors willing to take risks on new innovations. As we understand the challenge, most risk investors want to see a large number of potential investments that Nebraska does not yet provide. It is understandable why most venture capital firms are located on the coasts where the scale of start-up companies is significant. At the same time, Nebraska is steadily building home grown individuals prepared to make investments in start-up companies as Nebraska also begins to create entrepreneurial and innovation hubs. As Nebraska Innovation Campus continues to grow and develop a culture of innovation and entrepreneurial activity, we are optimistic the capital needs of these companies can be met.

With the Food Innovation Center we have an opportunity to be “best in class” in the food industry. The Food Sanitation Alliance, as well as the Food Allergy Alliance, are examples of our opportunity to become a center for talent and innovation for the food industry. The growing

software cluster in Lincoln also represents a unique opportunity to build strength and to become an attractive source of innovative new companies. Other university assets and research strengths can provide diversity to the companies we might attract.

State Funding Opportunities

In the 2015 Legislative session, the University requested two forms of additional state support for Nebraska Innovation Campus. While the University will clearly benefit from the success of Innovation Campus, the real success would be the economic growth and job creation potential for the project. We remain confident that Nebraska Innovation Campus will be successful. The investments by the private sector and the University have been substantial and will continue. However, additional state investments would ACCELERATE the time frame in which Nebraska Innovation Campus will produce the expected economic development rewards for the State.

Last year we proposed to the Appropriations Committee the creation of a \$25 million “evergreen” fund that would help address the challenge of funding sufficient facilities to always have shell and core space available for lease. The idea was to use the funding to pay for ½ of an 80,000 sq. ft. building if we could get a private developer to fund the other half. Then, when half the building was leased, the developer would buy back the ½ constructed with state funds, thus replenishing the fund.

At the time we submitted this proposal we had an oral agreement from our developer that they would participate in such a program but we had not had time to work out the details. The Committee understandably sought additional information and postponed its decision.

We have now had the time to flesh out an arrangement with the developer that varies somewhat from what we originally proposed. The developer has agreed to work in good faith to assure that Nebraska Innovation Campus will always have around 40,000 sq. ft. of leasable space. Indeed, if there are stable, credit worthy tenants that occupy additional spaces of 80,000 sq. ft., the developer will consider beginning new construction on its own without state support. This is a major development that, in the short-run, will assist NIC to move forward.

The difficulty still remains that the long-term success of NIC depends on its ability to attract and grow smaller innovation companies. These companies offer significant promise for economic growth and yet require substantial support in their early years. They also represent too great a risk of failure to make them the basis for a private developer's willingness to build speculative space. Thus, if the state determined to provide the evergreen fund requested, it would be limited to circumstances where it is unrealistic to expect the existing tenant base to support private developer risk. The fund could be used to support the build-out of space for companies unable to sign long term leases. These companies would be expected to pay an amount reflecting the built out improvements and the fund would stand behind this portion of the rent should the company fail or otherwise leave the property.

With these two types of investments, the State could provide a backstop to accelerate the momentum of Nebraska Innovation Campus by funding risks that cannot reasonably be borne by the private sector. We have attached as appendices an outline of a general agreement with the developer of how the Evergreen Fund would work, and a draft MOU reflecting their commitment to continue to invest at their own risk when the tenant base can support

additional investments. Drafts of agreements are found in **Appendix C** and **Appendix D**. They remain subject to negotiation.

Given the developer's new agreements, the University will need to evaluate whether in the next session the funding of this evergreen fund will be a University priority. At some point, however, it will be clear that an additional Legislative investment will help accelerate the promise of Nebraska Innovation Campus.

Conclusion

Nebraska Innovation Campus is a mechanism to enhance the returns on the investments the State makes in the University by leveraging our research and the concentration of young talent represented by our student body to produce economic growth and to retain this talent in Nebraska. As other research parks have shown, there is real economic growth potential. At the same time, the returns from these investments are not immediate. We believe we are ahead of our own projections and have moved more quickly during this initial stage than most of the research parks we have identified as comparable. We are excited about the future.

Appendix A

Time Line: State Fair to Innovation Campus

TIMELINE

From State Fair Park to Nebraska Innovation Campus

2003-2015

Concerns about the Future of the State Fair

2002 - State funding shortfalls resulted in cutting approximately \$300,000 of state support for the 4-H/FFA programs at the State Fair. The Fair received no other state appropriations.

October 2003 - The State Fair Board acknowledged that the State Fair and its campus were in dire financial crisis, both short and long-term. A *Partnering Committee* was formed to assist in creating a new model to help the fair survive. Governor Mike Johanns, Mayor Coleen Seng, Chancellor Harvey Perlman, LPS Superintendent Phil Schoo and Lincoln Chamber of Commerce President Jim Fram asked several community and governmental leaders to work with the State Fair Board to study the problems and opportunities and recommend a set of concepts for a viable State Fair.

December 2003 - The State Fair was unable to pay UNL \$279,000 for utilities purchased from University. The University carried the debt.

January 2004 - The report of the Partnering Committee was released, citing losses for the State Fair in 2003 of \$724,000 and in 2001-2003 of \$2,358,000, and recommended Legislative approval for allocating to the State Fair \$2 million annually in lottery proceeds, \$500,000 to be used for programming and \$1.5 million to be used to fund 20 years' of debt service for necessary capital improvements and repairs. The committee also believed that standing alone, the State Fair would need substantial state support and thus proposed co-location of the State Fair and the Ag Society Events Center at State Fair Park.

January 9, 2004 - The State Fair Board unanimously passed a motion supporting the overall concepts of the Partnering Committee report.

November 2004 - Amendment 4 passed by a majority of Nebraska voters. The Constitutional Amendment allowed State Fair Park to receive 10% of the state's lottery proceeds or approximately \$2 million annually. The receipt of lottery funds was contingent upon the host city (Lincoln) providing 10% or approximately \$200,000.

April 2005 - October 2006. Lincoln Mayor Coleen Seng formed an Event Facility Task Force to study all event facilities in Lincoln. State Fair Board representatives were included on the task force. Throughout this period the Task Force, using outside professionals and community

members, conducted a thorough study and concluded in November 2006, that the State Fair and the Lancaster Events Center should co-locate at 84th and Havelock on land owned by the University.

October 2006 - The County Agricultural Society endorsed the Task Force recommendation to co-locate the two events as long as they were co-located at 84th and Havelock. The State Fair Board resolved that co-location was problematic, that 84th and Havelock was unsuitable, and that the State Fair should stay at State Fair Park.

November 9, 2006 - Vision 2015, a private, informal group of Lincoln business leaders, proposed plans for Lincoln that included transforming State Fair Park into a University research and development campus. Vision 2015 also proposed creating a high amenity agricultural exposition center at 84th and Havelock.

November 10, 2006 - Vision 2015 makes a presentation to State Fair Board inviting them to assist in conducting a study of the costs associated with the State Fair remaining on its current site or moving to 84th and Havelock. The group pledges to pay 10% of the moving costs from private philanthropy if the study determines that was the best solution. The State Fair Board refuses to participate in any study.

Legislative Action

2007 Legislative Session includes bills that relate to State Fair Park:

- LB131 called for input from the University of Nebraska-Lincoln on its possible use of State Fair Park and adjoining property as a technology showplace. The original bill called for development of “University Research and Development Corridor Master Plan.” LB 131 was not enacted but legislators agreed that the university could conduct its own study of how the university might use State Fair Park.
- LB435 requires State Fair leadership to file an updated master plan before undertaking any major construction at the fairground. This bill calls for the identification of the financial resources needed to run a viable State Fair and an analysis of the current fiscal resources available for the Fair. After passage legislative hearings are scheduled for fall 2007.

October 1, 2007 - As a result of LB 435, a Phase I report was presented by consultant HOK Smith Forker in a public meeting to the Legislature’s Agriculture Committee. The report indicated that to *build from scratch* a successful State Fair would cost \$175 million.

November 15, 2007 - The Phase II report was presented by consultant HOK Smith Forker in a public meeting to the Legislature’s Agriculture Committee. This report compared the model State Fair of Phase I with the *existing facilities* of the State Fair. The report concludes that the

State Fair Board could come close to a successful state fair for an investment of another \$30 million.

November 17, 2007 - UNL releases concept plans for the use of State Fair Park as a model research park called “Nebraska Innovation Park” to include a mix of public and private facilities for research, retail, parking, greenhouses, recreation and social activities.

December 11, 2007 - An acknowledgement was made, in a joint statement released by the Star Fair Board and the University that both the State Fair and a private-public research campus could not co-locate on the current state fair grounds.

December 14, 2007 - Five proposals to move State Fair Park were presented to the Legislature’s Agricultural Committee. “Friends of Nebraska Innovation Campus” proposed moving State Fair to land located at 84th & Havelock and creating an expanded Lancaster County Events Center. The University reiterated plans unveiled the previous month for an innovation campus, Grand Island and North Platte presented plans to move the Fair to those communities, and the State Fair presented a plan to stay at the same location, resisting co-location with the Lancaster County Event Center. The State Fair Board suggested it would invest \$7 million for urgent projects on the fair grounds and \$22 million later, on a pay-as-you-go-basis to address infrastructure and maintenance concerns.

2008 Legislative Session – LB 1116 was enacted transferring State Fair Park to the University by 2010, and moving the State Fair to Grand Island. LB 1116 also required the University to have a master and business plan for its Innovation Campus by 12/1/2009, and required other monetary donations to move the State Fair including 21.5M from the University and 8.5M from the City of Grand Island.

April 2008 – LR 400 is introduced by the Agriculture Committee of the Legislature in order to monitor the implementation and legislative intent of LB 1116. The study resulted in creating a Task Force which discussed the financial commitments required, resolution of property owned by third party interests, the future of horse racing, cooperation amongst affected entities, executive of agreements and site planning for capital improvements, potential additional statutory requirements and planning for the State Fair.

The Development of Innovation Campus

July 11, 2008 – A Request for Information (RFI) is posted to seek information and ideas from qualified developers regarding how the University might use State Fair Park. This information was used to craft the subsequently issued Request for Proposal (RFP).

December 23, 2008 – UNL issues RFPs for independent consultants to develop a Master Plan and Business Development Strategy and Plan for Nebraska Innovation Campus (NIC) Project. Proposals were due on February 10, 2009.

April 24, 2009 – The Board of Regents approved the consulting contracts to develop the business and master plan as required by LB 1116. The Business Plan consulting team was led

by the Noddle Development Company of Omaha and included numerous national experts on the development of research parks. SmithGroup/JJR, the seventh largest architectural firm in the country, was selected to do the physical Master Plan.

November 20, 2009 – The Board of Regents approved the Master Plan and Business Plan for Innovation Campus for submission of both plans to the Legislature by December 1st as required by LB 1116.

December 2009 – Nebraska Innovation Campus Business Development Strategy (i.e. business plan) and Master Plan delivered to Department of Administrative Services (November 24, 2009)

December 9, 2009 – The Board of Regents accepted the transfer of title of the Nebraska State Fairgrounds in Lancaster County from the State of Nebraska to the Board of Regents.

January 2010 - Site clearing and preparation began. A majority of buildings were relocated, salvaged, or removed from the site.

February 8, 2010 – The final full report of the Nebraska Innovation Campus Master Plan is completed by the Smith Group/JJR. (A preliminary report was provided to the Board of Regents in October 2009.)

March 5, 2010 - An RFP was issued inviting proposals from qualified developers to redevelop, relocate, or adaptively reuse the Industrial Arts Building. The University required responding parties to include a financing plan that did not place the financial burden on the university. Proposals were due on July 1, 2010.

May 2010 – A blight & substandard determination was completed by the City of Lincoln.

June 29, 2010 – NICDC Board decided to interview potential master developers who would have an interest in developing NIC and were willing to bring investment capital and share in the business risk.

April 16, 2010 – Based on the governance recommendations in the final Business Plan for Innovation Campus, the Board of Regents approved Articles of Incorporation and Bylaws for the new governing board of Nebraska Innovation Campus – Nebraska Innovation Campus Development Corporation (NICDC), a 501(c)3, created under the umbrella of the University Technology Development Corporation (UTDC).

September 7, 2010 – NICDC board interviewed Woodbury Corporation, the only firm expressing interest in developing Innovation Campus.

September 10, 2010 – The Board of Regents approved the master lease of the former State Fair Grounds to NICDC which allowed the land to be formally designated as Nebraska Innovation Campus.

September 10, 2010 – The Board authorized the President to execute, approve, and administratively process the Nebraska Innovation Campus Covenants, Conditions and Restrictions.

October 2010 -- UNL contracted with Alley Ponyer Macchietto Architecture to document the Industrial Arts Building using the guidelines of the Historic American Building Survey (HABS), a program of the National Parks Service. The Historic American Buildings Survey (HABS) was established for the purpose of establishing guidelines for documenting America's architectural heritage. Records consist of measured drawings, archival photographs, and written reports.

November 23, 2010 – NICDC Board approved finalizing a Phase I Development Agreement with Nebraska Nova LLC, a company partially owned by Woodbury Corporation.

January 2011 – LB 377 was introduced at the request of the Governor, which included an appropriation request for \$25 million dollars; \$10 million for renovation of the 4-H Building and \$15 million for the “Food, Fuel and Water Research Building.” LB377 was enacted allowing the University to leverage investments by the private sector to begin development of Innovation Campus.

June 6, 2011 - The Planned Unit Development (PUD) documents and the Redevelopment Plan were approved by the City Council.

June 8, 2011 - Woodbury Corporation, managing partner of investors Nebraska Nova LLC, unveiled \$80M in building plans for the first phase of development at Nebraska Innovation Campus.

September 9, 2011 – The program statement is approved by the Board of Regents for renovation of the 4-H Building.

October 1, 2011 – The NICDC Board of Directors hires the first permanent staff position for NIC. Dan Duncan was appointed as Executive Director of the NICDC on a part-time basis (80%). This position became full-time on July 1, 2012.

January 5, 2012 – After extensive discussion with historic preservationists regarding the viability of renovating or demolishing the former Industrial Arts Building, plans were developed to renovate and maintain the exterior faced while incorporating greenhouse and research space.

July 12, 2012 – The redevelopment agreement was signed by the City of Lincoln.

September 14, 2012 –The Board of Regents approved the University lease program at Nebraska Innovation Campus, including the Letters of Intent to Lease between the Board of Regents and Nebraska Nova to lease space for the University of Nebraska Innovation Campus.

September 14, 2012 – The Board of Regents approved the property transfer agreement with the Nebraska Innovation Campus Development Corporation and ~~with~~ Nebraska Nova for development of the first two site development lease sites, one of which will be in the form of a condominium form of ownership, Site Development Lease 1, the 4-H Innovation Complex. The east portion of the 4-H Wing and Innovation Complex will be owned by the Board of Regents although units and 2 and 3 will be owned by the site development entity, Nebraska Nova.

November 16, 2012 – A groundbreaking event was held on NIC to mark the start of construction of Innovation Commons which included the renovation of the former 4-H Building and a new building, financed by the private developer, including a 2-story connector.

September 20, 2013 – Board of Regents approves the project financing for construction of the Centralized Renewable Energy System (CRES) at Nebraska Innovation Campus. The City wastewater system will provide treated waste water. Net cash flows remaining after debt service, expenses, and other costs will be shared with 33% payable to the City for use of its water and the remainder to the University.

February 21, 2014 – Revisions to the lease program were approved by the Board of Regents to include movement of greenhouses from the former Industrial Arts Building to the Life Sciences Collaboration Center and relocating the Department of Food Science and Technology from East Campus to NIC to form the Food Innovation Center.

March 2014 – Construction begins on both the Greenhouse Innovation Center and the Food Innovation Center on NIC.

July 2014 – NIC Conference Center Opens

September 19, 2014 – Board of Regents approve tenant improvements in the Food Innovation Center and greenhouses. Decision made to move all Food Science & Technology classrooms to the Food Innovation Center.

November 20, 2014 – Subleasing space for the Food Innovation Center was approved by the Board of Regents in order lease spaces to potential partners with businesses that are consistent with University initiatives.

May 30, 2014 – Approval given by the Board of Regents for a five year agreement with the City of Lincoln to provide StarTran business service connecting UNL City and East campuses to NIC.

March 1, 2015 – Greenhouse Innovation Center opens.

July 6, 2015 – The Food Innovation Center opens.

July 14, 2015 – Pursuant to an agreement, the private developer issued an RFP for the design of Site Development Lease III, and 80,000 sq. ft. mixed use building. SDL III is the final building in

phase I of NIC development and will bring the campus building inventory to a minimum of 460,000 sq. ft.

Appendix B

Consultant's Report 2014

Confidential

TO: Dan Duncan
Executive Director
Nebraska Innovation Campus

From: Bruce A. Wright

SUBJECT: NICDC Board Retreat: Observations and Recommendations

DATE: September 2, 2014

I very much enjoyed the opportunity to participate in the recent NICDC Board Retreat. Based on the discussion during the retreat, our conversations and my tour of the campus, I offer the following observations and recommendations:

Observation 1: The physical development of the park is impressive. In five short years, NIC has moved from concept to reality. The park has a contemporary, high tech profile while embracing a connection to the history of the site (fairgrounds).

The quality of the initial development makes a strong statement that that University and NICDC are committed to developing a first class park. This can be a powerful message when trying to convince potential tenants to locate at NIC.

Observation 2: NIC enjoys the strong support of the University and the Chancellor. The investment by the University in the campus has been substantial and provides a great platform for developing the commercial aspects of the campus.

Observation 3: The name of a park is important. Your name (campus rather than park) implies that NIC is a university-driven innovative. The expectation of the commercial world will be that the University has a strong and meaningful presence in the park. Potential tenants will want to know what is the nature of the university's presence in the park and how does it provide value to them – opportunities for collaborate research, access to faculty and students, involvement in the university's technology commercialization process, use of university facilities and equipment, etc.

Recommendation: Explicitly define the university-value proposition. What will be the technology focus of the campus? How do companies connect with faculty and students? How can companies use university facilities and what are costs/rates? How do companies license university development technology? Do companies and their employees receive any university benefits (i.e., access to the library, discounted tickets for cultural and athletic events, preference for university contracts)?

Observation 4: There is the potential for competition between Downtown/Haymarket and NIC. The market may not be large enough to sustain such competition, putting both developments at risk.

Recommendation: Efforts should be made to align the development efforts of the City and University. This could be accomplished by differentiating the targeted markets between the two areas. The University and City should jointly conduct a real estate absorption study to determine the direction, velocity and conditions of the local and regional real estate market.

Observation 5: The conference center is exceptional. It is an attractive campus amenity.

Recommendation: An aggressive effort should be made to host regional and national academic, professional and industry meetings, conferences and workshops in the center. These meetings can be used to showcase the University and market the campus.

Observation 6: The NICDC staff is impressive. They are focused in their efforts and very productive. They have accomplished much in a very short period of time. However, the staff is thin. The addition of a business development officer is positive step forward. Given the current evolution of the campus, the Executive Director spends a disproportionate amount of his time overseeing the physical development of the campus.

Recommendation: The board should authorize hiring a construction and facilities manager. This would allow the director to focus on the broader functions of campus development, marketing and business attraction.

Observation 7: The University and NICDC have entered into a very favorable partnership with its developer. Very few parks in the US have been able to secure a “developer at-risk”. However, there are some vulnerabilities associated with this model: (1) the developer is developing several projects in Omaha, and thus may not put first priority on development at NIC, (2) if the developer builds speculative space, it may feel pressured to secure paying tenants that are not aligned with the focus of the campus or relevant to the University, and (3) the developer will passively market the park to its traditional tenant base and not to tenants that are strategically relevant campus and university.

Recommendation: Marketing of NIC should be vested with the NICDC staff and not with the developer. The developer should contribute to the cost of the business attraction/marketing staff and marketing campaign.

Recommendation: Target marketing to companies in the fields of food, fuel and water. Identify companies through a business targeting program (similar to ours at UA). Complete an asset map for each technology area, perhaps using university interns to conduct the research.

Observation 8: Funding for NICDC seems ambiguous and insufficient. The University has funded much of the effort to date. The use of these funds is constrained by state and university procurement policies and procedure. NICDC lacks “unrestricted” funds for operations, marketing and events.

Recommendation: Develop a stable source of annual funding for development, operational and marketing expenses. Possible sources could include – land rent, sale of property, loan from the University, grants, and philanthropy.

Observation 9: NICDC has an impressive board of directors representing key stakeholders and constituencies. The board members seem genuinely engaged with and committed to NIC. However, there is a lack of clarity as to the role and responsibility of NICDC board. Is it a governing board or an advisory board? If NICDC is a governing board, then what are its primary responsibilities (commercial development, advocacy, fund raising, etc.). In addition, the organizational formalities of the board – the selection of directors, terms of office, election of officers, etc. – have not been clearly established? Finally, it may be time to shift from a university driven development process with the Chancellor as the chair of the board to a commercially driven development process with a non-university director serving as the chair of the board.

Recommendation: Appoint a board subcommittee to review the bylaws, develop selection criteria for directors, establish terms of office, and recommend a slate of officers.

Appendix C

Plan for Operation of Evergreen Fund

Evergreen Fund: Business Plan

I. **Basis of Agreement (Partnership)**

- 1) Agreement shall be formed as a partnership between the University of Nebraska and a Development Partner.
- 2) The contributions into the partnership shall be pro-rata at 50%.
- 3) Initial contributions shall set as a basis of site, construction, soft costs, landlord work and all other “development” related expenses.
- 4) Tenant improvements and other FF&E related items to be approved separately based on a tenant by tenant basis.

II. **Site Development Procedures**

- 1) A Site Development Lease (SDL) shall be signed once a site and project have been identified using the current methods identified in the Development Agreement signed between the NICDC and Nebraska Nova.
- 2) If the identified user for the site is tax exempt, land costs will apply according to the calculation identified in the Redevelopment Agreement.
- 3) All rules and regulations shall apply with regard to the development that are currently enforced at NIC.

III. **Partner Roles and Responsibilities**

- 1) University of Nebraska shall...
 - a. Designate parties that will be members of an executive committee which will meet bi-weekly to discuss the property level decisions which will go to the Evergreen Fund Board for approvals.
 - b. Stand up an “Evergreen Fund Board” that meet on a quarterly basis which will make final budgetary, design, tenant approval and other property level decisions for the partnership.
 - c. Fund their pro-rata share of costs within 45 days of receipt of an invoice that is part of an approved budgetary item.
- 2) Development Partner shall...
 - a. Designate parties that will be members of an executive committee which will meet bi-weekly to discuss the property level decisions which will go to the Evergreen Fund Board for approvals.
 - b. Establish reporting process “Evergreen Fund Board” which meet on a quarterly basis which will make final budgetary, design, tenant approval and other property level decisions for the partnership.
 - c. Fund their pro-rata share of costs within 45 days of receipt of an invoice that is part of an approved budgetary item.
 - d. Manage all project planning, design, development and construction processes.
 - e. Property manage all facilities once developed.

IV. **Tenant and Design Approvals**

- 1) Established NIC tenant approval processes shall be followed.
- 2) Established NIC design approval processes shall be followed.

V. **Project Stabilization**

- 1) Evergreen Fund Board to develop guidelines which qualify the definition of a “Stabilized Project.” Some of the specific points which would be used to identify a Stabilized Project may be the following
 - a) Percentage of “Rentable Space” leased within the facility
 - b) Lease rate of space leased within the facility
 - c) Tenant Improvement allowance given to the tenant prior to occupancy
 - d) Lease term of the tenants within the facility
 - e) Credit of the tenants within the facility
- 2) The Evergreen Fund Board will decide when a building is deemed to be stabilized based on certain criteria established and the current circumstances present on a project by project basis.

VI. **Recapture of Evergreen Fund Investments**

- 1) Once a project has been deemed “Stabilized”, the Evergreen Fund Board would have the following options with regard to ownership and/or Distributions at the partnership level would be offered between the University of Nebraska and Nebraska Nova:
 - a) Both parties stay in the partnership at 50% ownership and receive pro-rata distributions of cash flow.
 - b) If specific property is deemed to be Stabilized, but does not have positive Cash Flow, either party has the option to purchase at cost of construction all or part of the ownership interest of the other party.
 - c) If specific property is deemed to be Stabilized, and has positive Cash Flow, either party has the option to purchase at cost of construction plus an agreed upon Interest Rate spread above the Prime Lending Rate. The interest calculation would take into account actual dates when dollars were invested by either party into the project.
 - d) If specific property is deemed to be Stabilized, and has positive Cash Flow, either party has the option to purchase at an agreed upon Capitalization Rate (CAP Rate) based off of the properties Net Operating Income (NOI). An agreed upon example which identifies the NOI calculation shall be in place as a part of the development of the Evergreen Fund Board.
 - e) If specific property is deemed to be Stabilized, and has positive Cash Flow, either party has the option to purchase at cost of construction plus pay an annual payment to the other party as a percentage of cash flow. Ownership of the project would be held 100% by the purchasing party, but the distributions of Cash Flow would be adjusted accordingly.

Appendix D

MOU Regarding Developer Commitments

**Memorandum of Understanding
Between
Tetrad, Inc.
and the
University of Nebraska-Lincoln
and the
Nebraska Innovation Campus Development Corporation**

This constitutes a memorandum of understanding between Tetrad, Inc., the selected developer of Innovation Campus, (hereinafter Tetrad) the selected developer of Innovation Campus, the Nebraska Innovation Campus Development Corporation (hereafter NICDC) and the University of Nebraska-Lincoln (hereinafter UNL),

Whereas, the parties have a significant interest in assuring the sustained momentum of the development of Innovation Campus and that having a current supply of leasable shell space is a critical element in the Campus' success if it is to attract private sector companies.

Whereas, the parties originally agreed that when 50% of a future building was pre-leased, that Tetrad would construct the entire building and take the risk on the unleased space.

Whereas, the parties acknowledge that waiting for pre-leased space in order to construct a new building creates significant delays and thus jeopardizes the ability to attract private sector companies.

Whereas, the parties acknowledge that a private developer requires a "stabilized project" as the basis for proceeding to construct unleased space.

Whereas, the parties acknowledge that Tetrad committed to construct an 80,000 sq. ft. building of presently unleased space based on the University's agreement to lease 100% of the Food Innovation Center.

Therefore, the parties agree to the following:

1. The objective of the parties is to attempt to maintain at all times at least 40,000 sq. ft. of shell space available for lease to private sector companies, either as a result of new construction or vacated space in existing buildings.
2. The original agreement that Tetrad would construct a complete building when 50% of the building was pre-leased, is understood to contemplate that the pre-leased portion would constitute a "stabilized project".

3. In the event Tetrad is selected as the developer for a single tenant building of at least 80,000 sq. ft., and the project is a “stabilized project”, Tetrad agrees they would thereafter begin the design and construction process for an additional 80,000 sq. ft. building, with construction to begin within 6 months of the completion of the single tenant building or when there was less than 40,000 sq. ft. of shell space available for lease in all of the buildings developed by Tetrad.
4. In all other circumstances, when the leasable square feet on Innovation Campus falls below 40,000 sq. ft., Tetrad will in good faith determine whether their current leased space is sufficiently stabilized to provide the financial basis for construction of new shell space and shall report to the Board of NICDC on its analysis and conclusion. If Tetrad determines that the current leased space is sufficiently stabilized it will proceed to design and construct additional shell space.
5. If Tetrad determines that it is not alone in a financial position to construct another building, the University may determine to make such investments as are required to initiate the construction. Any such investment shall be governed by the Evergreen Fund Business Plan set forth as Appendix A to this MOU.
6. The parties agree that whether a project is sufficiently stabilized to form the financial basis for construction of presently unleased space is determined by several dependent factors including: the percentage of “rentable space” leased within the facility, the lease rate of space leased within the facility, the tenant improvement allowance given to the tenant prior to occupancy, the lease term of the tenants within the facility, and the creditworthiness of the tenants within the facility.
7. The parties agree that ordinarily the following would suggest that the project was stable:
 - a. The percentage of “rentable space” leased within the facility was at least 50%;
 - b. The lease rate of space leased within the facility was sufficient to cover the construction costs allocated to the space, tenant improvements provided by the developer, if any, the assessment for operating, maintenance, and common facilities, the ground lease owed to NICDC, and a profit for the developer.
 - c. The lease term of the tenants within the facility were at least 10 years.
 - d. The creditworthiness of the tenants within the facility was sufficient to support financing of additional construction.